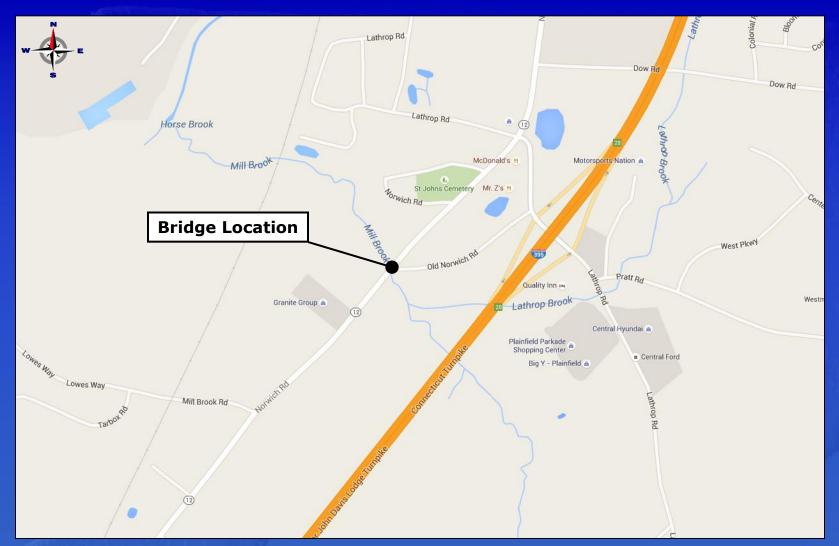
Public Information Meeting

Project 108-0185 Rehabilitation of Bridge No. 00668 **Norwich Road (CT Route 12)** over **Mill Brook Plainfield, Connecticut**



Project Location



CTDOT Role

Bureau of Engineering and Construction

Responsible for engineering design, construction, and inspection of transportation projects

Contact: Ms. Lesgie M. Ruiz

Transportation Project Engineer

Consultant Bridge Design

Close, Jensen and Miller, P.C. Consultant Liaison Engineers

CTDOT has retained the firm, Close, Jensen and Miller, to supervise the activities relative to the design of this bridge project.

Contact: Mr. Jeffrey J. Fontaine

<u>Kleinfelder Northeast, Inc.</u> <u>Consultant Engineers</u>

CTDOT has retained Kleinfelder Inc. (KLF) to provide the design of this bridge project.

Contacts: Mr. Kyle A Turschman, P.E.

(Project Manager)

Mr. Joshua Colella, P.E.

(Project Engineer)

Project Goals

- Improve safety at this crossing
- Rehabilitate Bridge No. 00668
- Minimize disturbance to traveling public
- Complete construction in a timely manner
- Effectively use funds

<u>Aerial View of Bridge No. 00668</u>





Upstream Elevation Looking North



Downstream ElevationLooking North





Route 12 Looking North

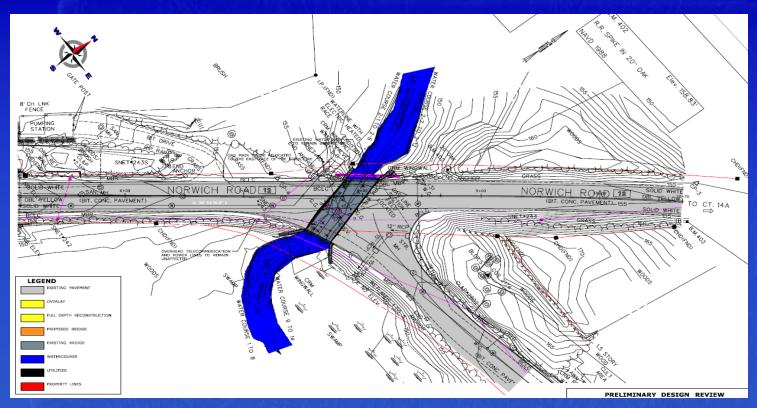




Route 12 Looking South

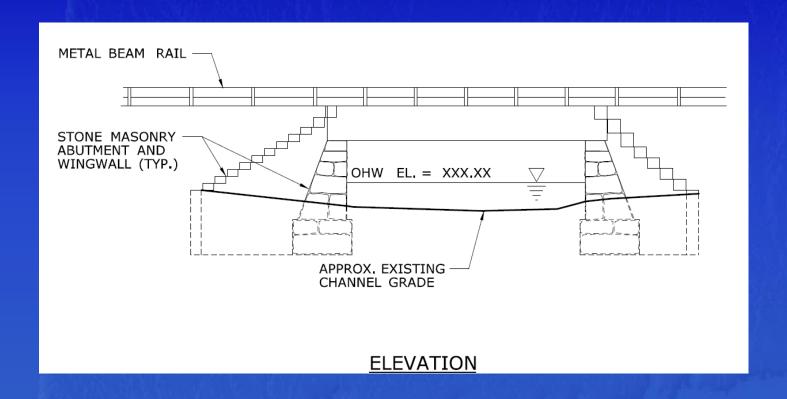


Existing Bridge



- Single span structure built in 1920, widened in 1924
- Structure Dimensions
 - Total Length = 24 feet ±, single span
 - Overall Width = Varies
 - Roadway width = 27.0 feet
 Connecticut Department of Transportation

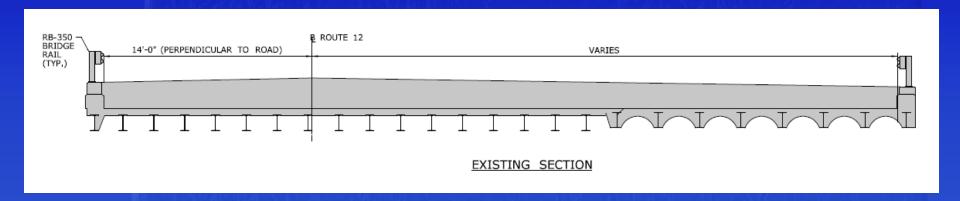
Existing Bridge



- Substructure consists of:
 - Mortared stone masonry abutments with flared mortared stone masonry wingwalls



Existing Bridge



- Superstructure consists of:
 - Steel rolled multi-girder superstructure with concrete deck and railing base. Continuous metal beam rail serves as the bridge railing.
- Carries one lane of traffic in each direction
 - Estimated Average Daily Traffic (ADT) ~ 8,200 vehicles (2014)



Reasons for Project

Bridge No. 00668 is recommended for rehabilitation for the following reasons:

- Structurally deficient superstructure
 - Rated "Poor"
 - Steel girders exhibit heavy rust along bottom flanges
 - Section loss along multiple beams
 - Minor voids in welds
- Substandard existing bridge railing and parapet

Reasons for Project



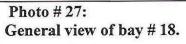




Photo # 28: General view of bay # 18.

Reasons for Project

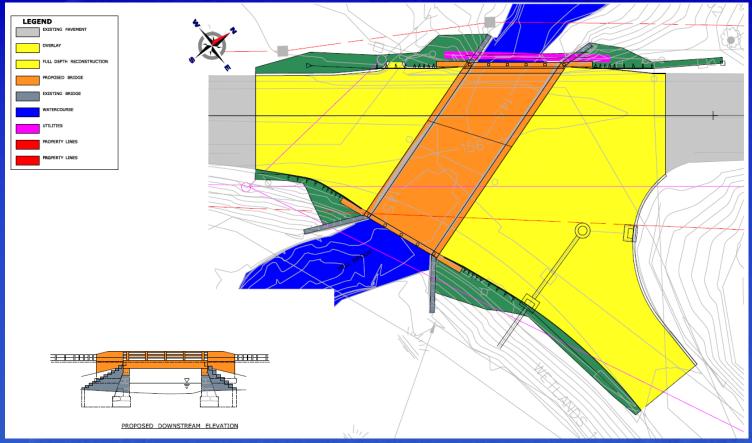


Photo # 29: Beam # 24, section loss to the bottom flange, midspan.



Photo # 30: Utility in bay # 15.

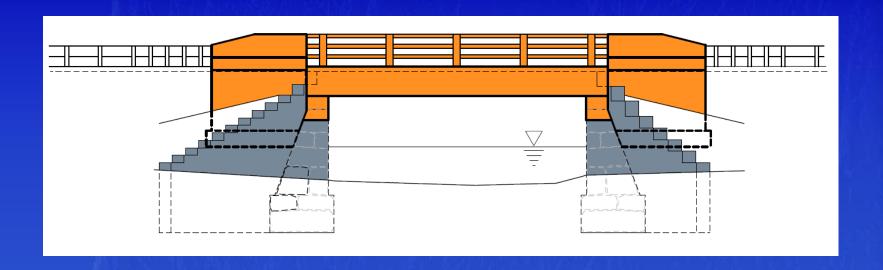
Proposed Construction



- Replace superstructure with a single span castin-place reinforced concrete slab.
- In line parapet end walls will be added at all corners of the structure.

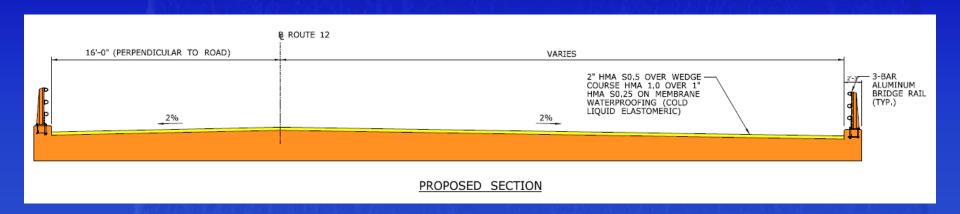


Proposed Construction



- Re-point any deteriorated abutment and wingwall joint mortar.
- Add a reinforced concrete abutment cap to support the proposed superstructure.

Proposed Construction

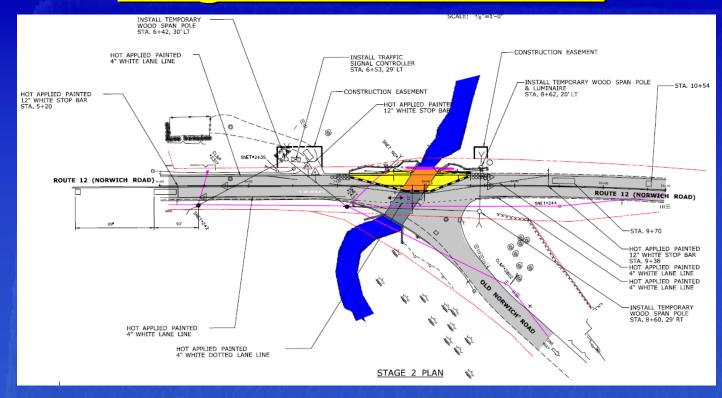


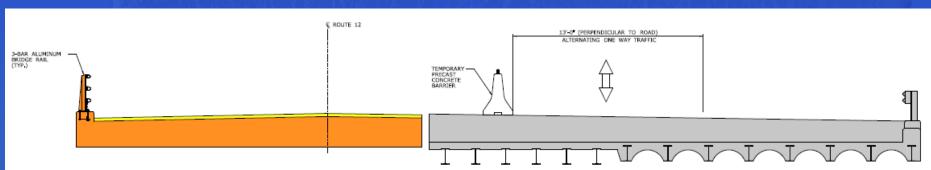
- Widen the span by 2 feet at the west fascia to accommodate a 4-foot (min.) shoulder and 12foot lane in each direction.
- Replace existing guiderail with Type R-B 350 metal beam rail
- An open railing system will be installed along the bridge

Staged Construction

- Construction will be performed in two stages utilizing signalized alternating one-way traffic
- A 13-foot travel way (min.) consisting of a 11-foot lane and 1-foot shoulders will be maintained during each stage

Staged Construction



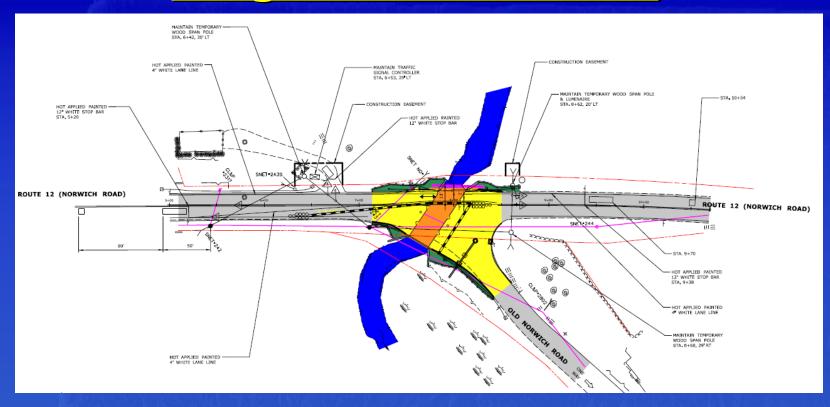


Stage 1

Connecticut Department of Transportation

PARTM

Staged Construction





Stage 2



Public Utilities

Utilities at the bridge site consist of:

- Overhead telecommunication and power lines run along the east side of the road.
- An 18 inch diameter water main runs parallel to the west bridge fascia (3'-3.25" average clear distance).
- An 8 inch gas main runs through the existing structure.

The overhead utilities and 18 inch diameter water main will remain unaffected during construction. The 8 inch diameter gas utility will be permanently relocated to the east face of the structure.

Environmental Considerations

- Wetland areas are known to exist within project limits
- No known contaminated and/or hazardous materials expected within project limits
- Best management practices will be utilized to handle sedimentation control during construction and to protect wildlife in the stream channel
- Environmental Permits will be acquired from DEEP and ACOE





Department of Transportation Division of Rights of Way (ROW)

Michelle Miller
Project Coordinator
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

Function

 Acquire all property/property rights necessary for transportation projects.



Statutory References

• State of Connecticut

C.G.S. Sections 13a-73 & 13a-98c

Federal

Uniform Relocation Assistance and Real Properties Acquisition Act of 1970, as amended.

Property Impacts

- Total Acquisitions
- Partial Acquisitions
- Easements
- Construction Easements
- Rights

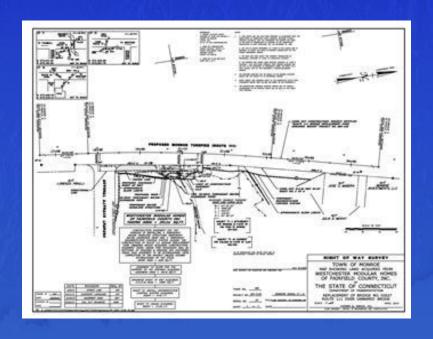


* Note: Specific impacts are subject to change as the design progresses.



ROW Acquisition Process

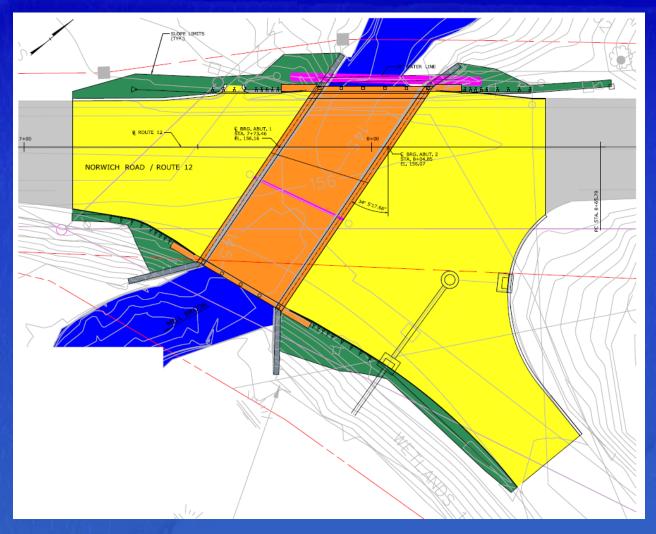
- Letter of Intent to Acquire
- Valuation
- Offer of Just Compensation
- Negotiation
- Acquisition
 - Agreement
 - Eminent Domain/Condemnation
 - » 6 month appeal period



Timing for Acquisitions

- All property rights must be acquired by the project advertising date.
- Current Advertising Date: 12/28/2016

Rights-of-Way



Based on the State boundary map, no impacts to private property are anticipated. All work will remain within the DOT-ROW.



Project Cost

The estimated construction cost for the project is approximately \$1,100,000.

Project Schedule

Construction is anticipated to be begin in Spring of 2017 and be completed by Fall of 2017.

Project duration estimated to be approximately 5 months.

The schedule is preliminary and is predicated upon the availability of funding.

Contact Information

- Connecticut Department of Transportation Ms. Lesgie M. Ruiz 2800 Berlin Turnpike, P.O. Box 317546 Newington, Connecticut 06131-7546 860-594-3351
- Close, Jensen and Miller, P.C.
 Mr. Jeffrey J. Fontaine
 1137 Silas Deane Highway
 Wethersfield, Connecticut 06109-4201
 860-563-9375
- Kleinfelder Northeast, Inc.
 Mr. Kyle A. Turschman
 500 Enterprise Drive
 Rocky Hill, CT 06033
 860-258-7124

THANK YOU...

FOR YOUR TIME AND ATTENTION

Connecticut Department of Transportation,
Close, Jensen and Miller, P.C.
and
Kleinfelder Northeast, Inc.



Bridge Underside & North Abutment
Looking Northeast



Bridge Underside & South Abutment
Looking Southeast